

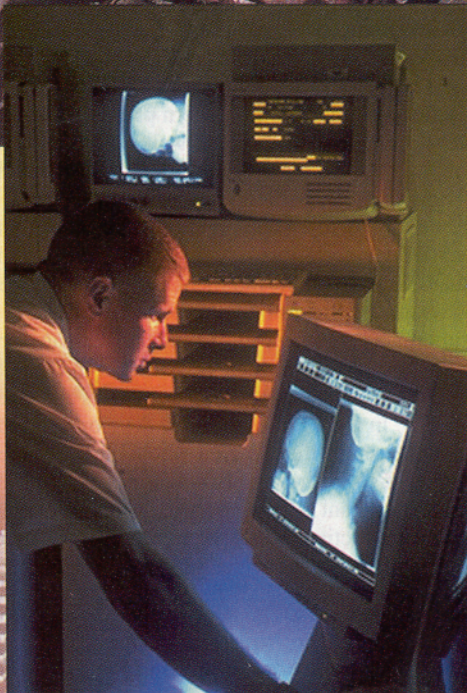
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MEDICAL RESEARCH & MATERIEL ACQUISITION



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MAINTAINING THE HEALTH AND WELL-BEING OF SENIOR LEADERS IN THE ARMY THROUGH MEDICAL RESEARCH

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Introduction

Although senior Army leaders are critically important to the success of military operations, they have only been studied in terms of their personalities and leadership styles. Further, the information obtained from these studies was used primarily for the selection and training of future Army leaders. Surprisingly, the systematic investigation of senior leaders themselves has received very little attention. Yet the workload and responsibilities of Army senior leaders are arguably the highest of any single military group. Senior leaders must maintain cognitive readiness to maximize their performance and well-being during periods of heavy workload and high-operational tempo.

As such, a study was conducted in Europe by the authors of this article, with COL Belenky serving as scientific advisor. The data presented in this article were collected between May and December 1999. The objective was to address four fundamental aspects of senior leadership environment and performance: to characterize the workload (or personnel tempo) of senior Army leaders; to develop a descriptive summary of their health; to measure how much sleep senior leaders receive by having them wear an actigraph monitoring device; and to identify relationships between workload and well-being, focusing on how senior leader performance and well-being could be optimized during periods of heavy workload and high operational tempo. The assessment methods

and initial findings of this research are briefly summarized in this article.

Defining Senior Leaders

Senior leaders were operationally defined as commanders who served at the battalion level or higher and those officers in the rank of colonel or general officer who occupied key staff positions at the division level or higher. Junior leaders were primarily first and second lieutenants serving as platoon leaders as well as captains serving in company-level commands, which included company, troop, and battery commanders.

Methods Of Assessment

Multiple methods of assessment were used. Initially, senior leaders completed a survey asking about their work habits, stressors, health, well-being, and family commitments. Next, senior leaders were interviewed, focusing on the challenges and stressors of their current job and how they cope with these challenges. Finally, senior leaders were asked to wear two monitoring devices (photo on Page 13). The actigraph monitoring device measures activity that can be used to accurately determine sleep and wake periods. Worn on the wrist, this device provides data to estimate the effect on subsequent performance. The BootStrike monitoring device, worn on the subject's boot, measures the amount of time that the wearer's foot is in contact with the ground. Given a person's body weight and foot contact time, caloric

expenditure during physical activity can be accurately determined. Both of these devices were worn between 60 and 90 days, during the normal course of the senior leaders' duties.

Initial Findings

To date, 12 male senior leaders have been assessed. Collected data were compared to data from 46 junior officers. Senior leaders in the initial sampling were all married, had a mean age of 48 years, and averaged 25.4 years of military service. Relative to junior leaders, 53 percent were married, had an average age of 30 years, and averaged 7.6 years of military service.

Workload. While senior leaders participated in more military deployments than junior leaders (7.8 deployments vs. 1.6 deployments), the deployment load (i.e., the number of deployments averaged across years of military service) of the two groups were the same. However, senior leaders reported a higher personal workload than junior leaders. Analyses indicated that senior leaders reported working more hours per day than junior leaders (13.6 hours vs. 12.0 hours) and more days per week (6.7 days vs. 5.5 days). In addition, senior leaders reported losing more leave time in the previous 12 months than junior leaders (8.3 days vs. 1.9 days).

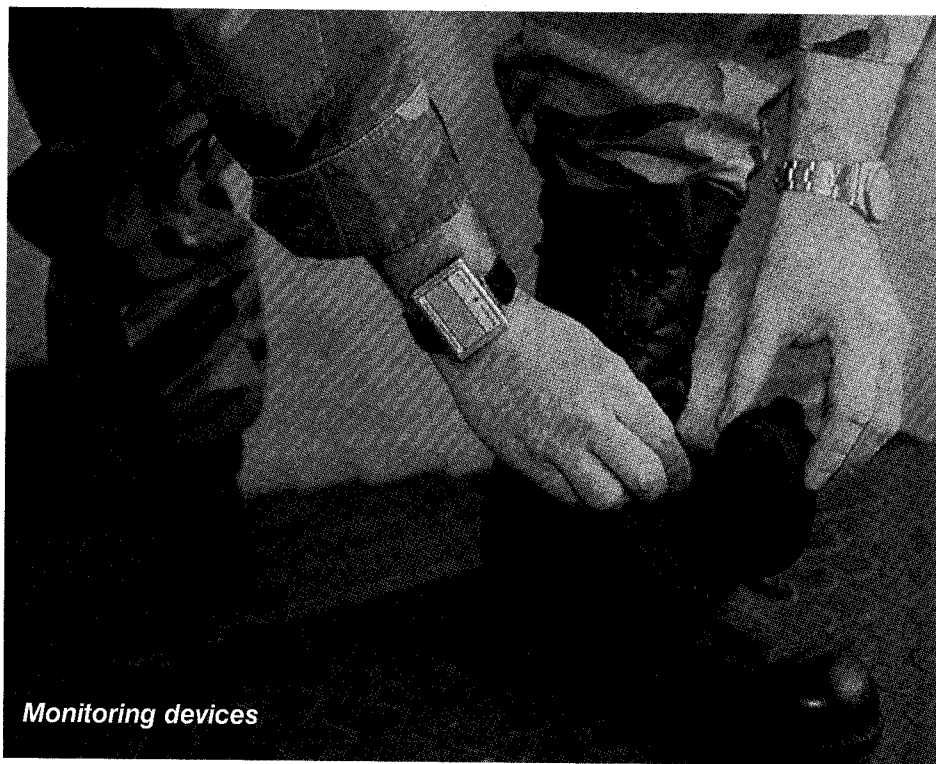
Stressors. The most frequently reported stressors for senior leaders was lack of time for personal health and fitness (rated as a high or very high stressor by 58.3 percent of the senior leaders); yet on

average, senior leaders exercised for at least 30 minutes per day four times a week. This amount of exercising was similar to that of junior leaders.

The second highest stressor for senior leaders was responding to e-mail (rated as a high or very high stressor by 41.7 percent). Within the context of high workload, senior leaders reported that their families were a source of very little conflict with their work responsibilities. Senior leader scores on the Family-Work Conflict Scale were significantly lower than junior officers. In contrast, there was no difference on the Work-Family Conflict Scale (or the degree to which work interferes with family life) between the two groups. In fact, both senior and junior leaders reported that their work schedules significantly interfered with family commitments and obligations.

Health. In terms of other health outcomes, senior leaders reported sleeping an average of 5 hours and 50 minutes per night, while junior leaders reported sleeping an average of 6 hours. Senior and junior leaders did not differ in their psychological or physical well-being. The physical symptom most reported by senior leaders was back problems. In terms of morale, most senior leaders reported high or very high personal morale and motivation (83.3 percent on both items), while only 53 percent of the junior leaders reported high or very high morale. In contrast, only a third (33.3 percent) of the senior leaders reported high or very high levels of energy compared to almost two-thirds (60.8 percent) of junior leaders.

Pace of Operations. Not surprisingly, these findings confirm that the workload of senior leaders in the U.S. Army, Europe is exceedingly high, with senior leaders working nearly 14 hours a day, 7 days a week. Given such an intense work schedule that does not allow for a recuperative period, it is not surprising that senior leaders report that, although their motivation is high, their level of energy is not. However, this pace of operations did not appear to produce any immediate ill effects on either their psychological or physical health. Overall, the health of senior leaders is good. However, the evidence indicates that their quality of life is diminished. Senior leaders have or take very little time off for anything that is not



Monitoring devices

mission-related. Given the amount of time that senior leaders (and junior leaders) spend engaged in military-related tasks, clearly their commitment to the mission and the organization creates a situation in which they structure their lives to meet the needs of the military first rather than their personal or family commitments.

Future Work

Further research on senior leadership issues and workload and medical readiness issues will focus on integrating the quantitative data from the survey instrument (reported here) and the actigraph and BootStrike monitors with qualitative interview data; exploring how the relatively high workload of junior leaders impacts their overall well-being, and focusing on how the current operational tempo is affecting their career intentions; expanding the present investigation of workload and health assessment to include noncommissioned officers, specifically command sergeant majors and first sergeants; and developing a research model to determine how war planners (staff officers) are specifically affected by the high pace of operations in the U.S. Army, Europe. The latter is particularly relevant in relation to staff officers engaged in operational planning of current military missions. This systematic approach to investigating the rela-

tionships between workload and medical readiness will contribute significantly toward ensuring that the health and well-being of our leaders remain high at all levels.

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